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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,599

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Bernd Rumpf

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09/26/2008

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EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,599	<b>Applicant(s)</b> RUMPF, BERND	
	<b>Examiner</b> LEONARD J. WEINSTEIN	<b>Art Unit</b> 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/07</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This office action is in response to the amendment of June 2, 2008. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

2. The examiner acknowledges the amendments to claims 1-9.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Eck 6,488,476. Eck teaches all the limitations for a feed unit for a fuel tank 1 of a motor vehicle including: **(claim 1)** a baffle 2 having a first chamber 4 for collecting fuel, a fuel pump 10 for sucking up fuel and having a fuel-pump suction opening 15 arranged in vicinity of the bottom of the first chamber 4 of the baffle 2, as shown in figure 1 and defined by element 4 extending and being integral with surface of element 2, and a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is connected to the first chamber 4 via a valve 16, wherein in that the valve 16 is a throttle valve, with a volumetric flow of fuel that is restricted by the valve 16 being smaller than the volumetric flow fed by the fuel pump 10; **(claim 2)** a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and

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surrounding element 4, is manufactured integrally with the baffle 2, as element 4 extends and is formed integrally with the intermediate surface of element 2; **(claim 4)** a valve 16 is arranged in a wall which is common wall, as 16 is formed within the intermediate surface of element 2 which is integrally formed with element 4, to the first chamber 4 and the second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4; **(claim 5)** a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is configured as an annular chamber surrounding the first chamber 4, clearly shown in figure 1; **(claim 6)** a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, arranged within the baffle 2 and the common wall, intermediate surface of element 2 which is integrally formed with element 4 having element 16 therein, between the first chamber 4 and the second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is lower than an outer wall, vertically extending walls of element 2, of the baffle 2; **(claim 7)** and a valve 16 configured as an opening with a designated cross section.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Harde 4,354,521. Harde teaches all the limitations for a feed unit for (claim 1) a fuel tank 1 of a motor vehicle including: **[claim 1]** a baffle 3 which having a first chamber (A1), formed by element 4, for collecting the fuel, a fuel pump 6 for sucking up fuel and having a fuel-pump suction 9 opening arranged in the vicinity of the bottom of the first chamber (A1),

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formed by element 4, of the baffle 3, and a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, connected to the first chamber (A1), formed by element 4, via a valve 15, as shown in figure 6 wherein element 15 acts as a throttle by permitting a volume of fluid to move from element 3 to a space within element 4 as it has a smaller area than that of the surface of the containing element which the fluid passes through, wherein the valve 15 is a throttle valve, as discussed, with the volumetric flow of fuel that is restricted by the valve 15 being smaller than the volumetric flow fed by the fuel pump 6; **(claim 2)** a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is manufactured integrally with the baffle 3 (fig 6); **(claim 3)** a fuel unit provided with chambers, as formed by element 4 (A1) and the first and second chambers formed by element 3 surrounding element 4 (C), are arranged at the same height, the chambers as discussed each have bottom surfaces located at the same vertical position with element 1; **(claim 4)** a valve 15 is arranged in a common wall 11 of the first chamber (A1), formed by element 4, and second chamber (C), as defined by chamber formed within element 3 and surrounding element 4 and chamber B as shown in figure 6; **(claim 5)** a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is configured as an annular chamber which surrounds the first chamber (A1), formed by element 4, clearly shown in figure 6; **(claim 6)** a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is arranged within the baffle 3 and the common wall 11 between the first chamber (A1), formed by element 4, and the second chamber (C), as defined by chamber formed within element 3 and surrounding

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element 4, is lower than an outer wall, vertically extending walls of element 3, of the baffle 3; **(claim 7)** and a valve 15 is configured as an opening with a designated cross section.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eck 6,488,476. Eck discloses the claimed invention including a valve throttling a volumetric flow which flows from a second chamber, as defined by chamber formed above a bottom surface of and within element 2 and surrounding element 4 (Eck), into the first chamber 4, except Eck does not disclose a volumetric flow in which a level is equalized in three to five minutes after a fuel pump has stopped. The time needed to equalize a level of fluid in a first and second chamber is a results effective variable with the results being a fluid level equalizing three to five minutes after a fuel pump has stopped. It

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would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a feed unit capable of equalizing a fluid level within two chambers of a fuel tank within 3 to 5 minutes after a pump has been stopped, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eck 6,488,476. Eck discloses the general conditions of the claimed invention except for the express disclosure of a second chamber provided having a volume of approximately 10-20% of a baffle volume. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a second chamber comprising approximated 10-20% of a baffle volume, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harde 4,354,521. Harde discloses the claimed invention including a valve 15 throttling a volumetric flow which flows from a second chamber (C) into the first chamber (A1), except Harde does not disclose a volumetric flow in which a level is equalized in three to five minutes after a fuel pump has stopped. The time needed to equalize a level of fluid in a first and second chamber is a results effective variable with the results being a fluid level equalizing three to five minutes after a fuel pump has stopped. It would have been obvious to one having ordinary skill in the art at the time the invention was made

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to provide a feed unit capable of equalizing a fluid level, by changing a cross-sectional area of a valve element of Harde, within two chambers of a fuel tank within 3 to 5 minutes after a pump has been stopped, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harde 4,354,521. Harde discloses the general conditions of the claimed invention except for the express disclosure of a second chamber provided having a volume of approximately 10-20% of a baffle volume. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a second chamber comprising approximated 10-20% of a baffle volume, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

### ***Response to Arguments***

6. The rejections have been modified to address the amendments to claims 1-9.

7. Applicant's arguments filed June 2, 2008 have been fully considered but they are not persuasive.

a. With respect to the rejection of claims 1-2 and 4-7 under 35 § 102(b) as being anticipated by Eck US 6,488,476 the applicant argues that Eck fails to teach a feed unit including a second chamber connected to the first chamber via a valve. The applicant argues that Eck fails to teach or suggest a throttle valve



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with a volumetric flow that is restricted by the valve which is smaller than the volumetric flow **fed by** a fuel pump.

i. In response to applicant's argument that Eck fails to teach a second chamber connected to the first chamber via a valve, the examiner disagrees. Eck teaches a baffle that includes a ("second") chamber comprising an area above and a small area below an intermediate surface defined as the surface just below element 3. The area below the intermediate surface is considered to be the first section of the second chamber and the second section of the second chamber is considered as the area surrounding element 3. Element 3 includes holding structure element 4 that is considered to be the first chamber, and the communication passage defined by element 15 which surrounds element 6. Element 15 is located below element 4 and puts the first chamber that is defined by element 4, in communication with the first section of the second chamber located below the intermediate surface, by way of element 13 and the second section of the second chamber that is defined by the area surrounding element 3 and bordered by the inner walls of element 2 (baffle). The limitations as claimed require baffle to have a first chamber and a second chamber that are connected to each other via a valve. The limitations are sufficiently broad so as to encompass any two chambers that are defined by or contained in a baffle and capable of being put in at least fluid communication with the other through a valve. The

limitations do not require the valve to be the sole means of communication between the two chambers, rather that a valve be somewhere within the communication path between the two chambers. Applicant may argue the areas above and below the intermediate surface discussed above should be considered as individual chambers. This interpretation would not preclude the determination that Eck anticipates the limitations as claimed because the first section (second chamber) below the intermediate surface would still be put in communication with the first chamber defined element 14, through an opening 15, a valve 16, and a "third" chamber (second section defined by element 2 as discussed above).

ii. In response to applicant's argument that Eck does not teach a throttle valve with a volumetric flow that is restricted by the valve which is smaller than the volumetric flow **fed by** a fuel pump, the examiner disagrees. First it is necessary to note that the limitation of a "throttle valve" is sufficiently broad and is anticipated by almost any structure that restricts a flow of fluid between two vessels or chambers. The plain meaning of throttle and valve are:

- (1) A **valve** is a device that regulates the flow of materials (gases, fluidized solids, slurries, or liquids) by opening, closing, or partially obstructing various passageways. Valve, <http://en.wikipedia.org/w/index.php?title=Valve&oldid=235890416> (last visited Sep. 10, 2008).

(2) A **throttle** is the mechanism by which the flow of a fluid is managed by constriction or obstruction. Throttle,

<http://en.wikipedia.org/w/index.php?title=Throttle&oldid=229822119>

(last visited Sep. 10, 2008).

Given there plain meaning a valve, or a throttle, or a throttle valve, without further limitation, is any structure which obstructs flow of fluid (materials) and this would include element 16 of Eck which is a one way valve. The examiner also asserts that the limitations claim a valve between chambers that restricts flow so that is less then the volumetric flow on the discharge side of a pump ("fed by the fuel pump" - *emphasis added*). The examiner notes that the fuel pumps in both the instant application and Eck are positive displacement pumps which are placed essentially within a reservoir (chamber) that communicates with another reservoir (second chamber) via a valve, both reservoirs being surrounded by a third reservoir defined by a fuel tank. Almost any restriction of fluid flow between the first and second reservoirs is going to result in a volumetric fluid flow through that restriction that is less that a flow on the discharge end of the positive displacement pump. It is possible that applicant meant the limitations to read a valve restricting a volumetric flow to be less than a flow that is **fed to a** fuel pump but these limitations are not claimed and therefore Eck teaches the limitations as discussed above.

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b. With respect to the rejection of claims 1-7 under 35 § 102(b) as being anticipated by Harde US 4,354,521 the applicant argues that Harde fails to teach to teach or suggest a throttle valve with a volumetric flow that is restricted by the valve which is smaller than the volumetric flow **fed by** a fuel pump.

i. In response to applicant's arguments the examiner asserts that Harde teaches the limitations as claimed for the same reasons discussed above in item 6.a.ii as they pertain to Eck. Harde teaches chambers (A1, C) that are separated by a wall and in communication with each other through an orifice, element 15, considered by the examiner to be a throttle valve. As discussed above all that a "throttle valve" is limited is a structure or mechanism that in some way constricts fluid flow between two vessels. An orifice formed in a wall between two tanks or chambers have a smaller area on a discharge or outlet side than the area of the vessel which fluid is flowing from throttles the flow of fluid between the two vessels and reads on a "throttle valve" without further limitation. Further as discussed above the limitations require a volumetric flow through a throttle valve between chambers to be less than the volumetric flow on a discharged side of a positive displacement pump. As discussed above this limitation would almost always be satisfied by a restriction between reservoirs, one in communication with a pump inlet, in which fluid flows from one to the other and is then pumped by a positive displacement

pump, as the flow through the restriction on the suction side of the pump would be less than the flow on the discharge side (fed by pump).

***Conclusion***

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/  
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